

wildlife

R E V I E W



The next chapter:
Keeping you informed



Wildlife Review

Utah Division of Wildlife Resources

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Large photo at right: American white pelicans are a
common spring sight at Gunnison Island.

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2007
Spring

DIRECTOR'S MESSAGE



Our ability to provide you with information about Utah's wildlife has changed greatly since the first issue of the *Wildlife Review* magazine was published in 1993.

Back then, relatively few people used the Internet. No one had heard of podcasts, you couldn't find the word "blog" in a dictionary, and the number of sources that could provide you with the information you wanted the most were not even close to what they are today.

All of this new technology has given us the means to communicate with you in ways that are quick, easy and interactive.

For that reason, you're holding in your hands the final issue of the *Wildlife Review* magazine. In its place, we'll be taking the time and resources we've spent on the magazine and placing them into areas that will enable us to provide you with better

and more timely information than ever before.

This final issue of the magazine includes an article by Cory Maylett, our communications coordinator. His article will tell you more about why we're making this change, and what you can expect from us in the future. When you're done reading the article, I'm sure you'll be as excited about the future as I am.

Thanks for your support of the *Wildlife Review* magazine through the years. And as Cory mentions, we're not going away; in fact, you're going to start hearing from us more than ever before.

James F. Karpowitz

UDWR Director

A handwritten signature of Jim Karpowitz in dark ink.

"You're holding
in your hands
the final
issue of the
Wildlife Review
magazine."

BY CORY MAYLETT

Communications Program Coordinator



New access to wildlife information

In the future, plan to hear from us more than ever before.

The Division of Wildlife Resources has published the *Wildlife Review* magazine four times a year since 1993. With each issue, we've tried our best to convey the challenges, opportunities and excitement of hunting, fishing and enjoying Utah's incredible wildlife.

We've also written about our efforts

to conserve and improve this natural resource, which benefits you and every resident of the state.

On average, 20,000 copies of each magazine have been distributed to educators, members of our Dedicated Hunter program and to paid subscribers. Containing very little advertising, the *Wildlife Review* magazine was never intended to make a profit, or even to pay for itself.

Instead, our sole purpose with the magazine was to keep you informed.

Keeping you informed: the next chapter

Like any organization, we're always looking for ways to improve and do more with the resources we have.

In 1993, communication avenues were far more limited than today, and

a glossy, printed magazine was a good choice to help us achieve our goal of keeping you informed.

Today, however, dozens of television channels, larger local news operations, radio stations and the Internet deliver on-demand information to those who want it. On-demand news and information is available at the flick of a switch or the click of a mouse.

Our goal of timely communication makes the old three-month cycle of a printed magazine seem antiquated and much less attractive than it was 14 years ago.

And for that reason, this is the last issue of the *Wildlife Review* we'll publish.

Glossy magazines, of course, are still important and have their place, but the DWR's role is not (and never was) that

of a magazine publisher. Our objective with the magazine was simply to tell the story of Utah's wildlife. However, in today's information society, there are more efficient and less expensive ways to communicate.

For example, each year the division's Web site, *wildlife.utah.gov*, reaches several million people with more than 20,000 pages of information. A 32-page magazine that reaches a few thousand people four times a year is no match for the timely efficiency of the Division's Web site.

Freeing up the considerable resources spent planning, researching, writing, editing, photographing, designing, assembling, printing and distributing a wildlife magazine will allow us to devote more time to improving our Web site and working with the news media.

In addition, we're planning a free subscription e-mail list that will deliver wildlife news and information right to your computer's inbox. Instead of waiting three months for your magazine to arrive, you'll receive the same kinds of articles and more every couple of weeks.

And if you miss a few, you will find them archived on our Web site.

Even though we regret losing the magazine, we're excited about doing a better job at passing along wildlife-related information. As one chapter ends, a newer and bigger era of exciting interactive communication begins.

The DWR Web site

The Internet provides the DWR with an unequaled ability to keep you informed. Not only does it allow us to provide important information, but we can regularly update its content to reflect the very latest news and information.

We always post our Wildlife News press releases online just as soon as they're sent to the local news media. If there's an important wildlife news story in progress, chances are that you'll be able to read about it on our Web site before you see it on television or read about it in the newspaper.

As you probably know, buying your hunting and fishing licenses online is easy. For many people this is a convenient alternative to climbing into a vehicle and

driving to a Division office or a retail outlet. Not only is buying permits online simple, it saves time and gas.

Applying for hunt drawings online is fast and efficient too. As the 80 to 90 percent of hunters who apply online already know, applying online is much easier and more convenient than filling out and mailing in paper applications.

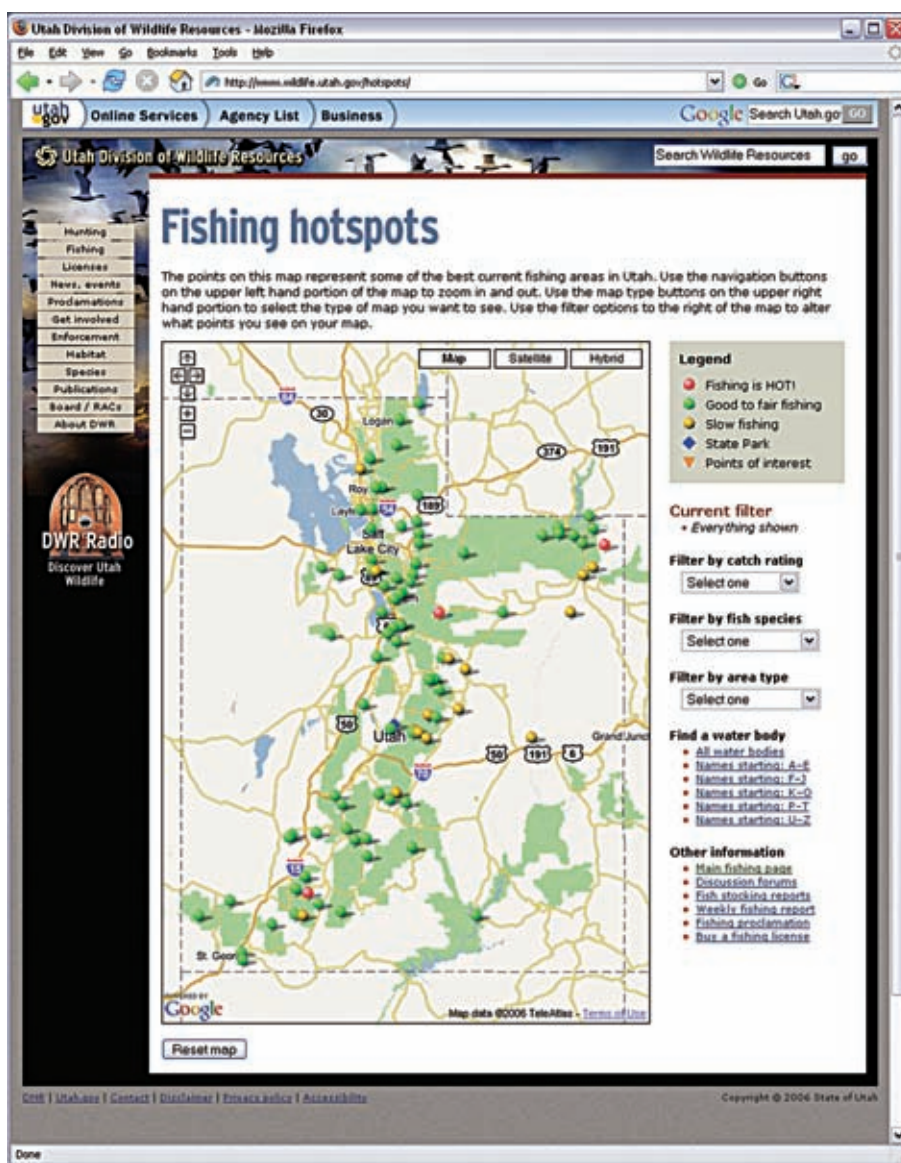
Each day, thousands of people log onto our online wildlife discussion

forums to interact with other wildlife enthusiasts. The forums are a great place to talk, share stories and exchange information with other hunters and anglers.

Need a hunting guide

or proclamation? You can travel across town to the nearest sporting goods store

A 32-page magazine that reaches a few thousand people four times a year is no match for the timely efficiency of the Division's Web site.



New features, like this page for fishing hotspots, will enhance the Web site.

to pick up a printed copy, or you can simply download the latest copy from the division Web site. The downloaded copy will always have the latest information — including corrections that might be missing from the printed version. While reading the guides online, you can also research additional information, download hunting maps or check the actual wording of state statutes and division regulations.

Anglers will certainly appreciate our new online Fishing Hotspots feature. Our biologists are constantly updating this interactive map-based feature with new information about what's hot and what's not at Utah's many fishing locations.

Are you or one of your kids thinking about attending a hunter education course? If so, the Division Web site maintains a complete listing of upcoming classes. You can even take part of your hunter education training online.

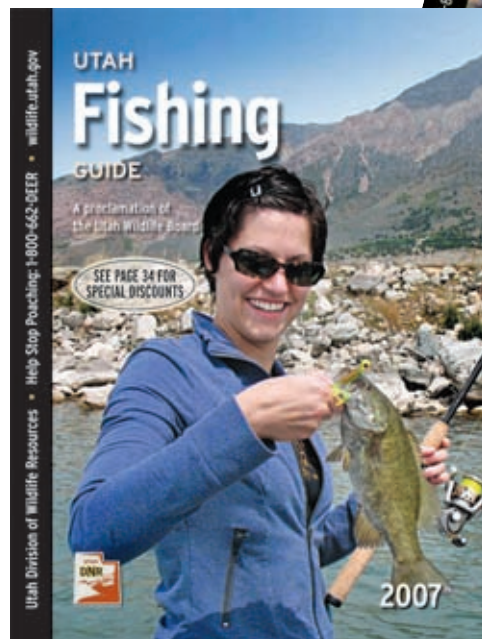
Have you ever driven through Utah while listening to the Division's weekly radio show, *Discover Utah Wildlife*? It is broadcast periodically on radio stations across the state, but is always available on the Division Web site. We keep an entire year's worth of radio programs online for you to listen to whenever you're in the mood. You can even sign up to have new shows automatically downloaded to your computer as podcasts!

With thousands of pages of material, the Division Web site offers far more than we can review here. The best way to explore this resource is to head your Web browser to wildlife.utah.gov. While there, check out the following features:

- An online calendar of Utah wildlife events
- A searchable database of Utah wildlife species
- Educator materials and resources
- Up-to-date information on public (RAC) meetings
- Information on wildlife and habitat projects

News media

Utah's news outlets are always interested in a good story. And luckily, we're in a position to provide them with plenty of



The new hunting and fishing guides are more user-friendly than ever.

great material. The long-standing interest Utahns have in wildlife ensures good coverage by the local newspapers and television stations.

We plan to work even harder to get stories out to the media—including print and video news releases and photographs. As circumstances warrant, we will continue to participate in radio and television interviews and broadcasts. Also, we will soon place our large collection of wildlife photos online for public browsing and for use by the media and educators.

Hunting and fishing guide books

Our series of hunting and fishing proclamations are another important way to keep you informed. These publica-

tions, that we've renamed "guides," contain the essential information that every Utah hunter and angler should know.

In keeping with the new name, we'll be making these publications more user-friendly, relevant and understandable. Who knows, you might even find yourself enjoying them!

One thing that hasn't changed is our goal of maintaining an open dialogue with you and everyone in Utah. We value your participation. We will do our best to supply you with the information you need to stay informed about Utah's wildlife and what the DWR is doing to manage and protect this incredible resource.

Even though the magazine is gone, stay tuned—you'll be hearing from us! 🐾

By **ROGER WILSON**
Sport Fishing Coordinator

Bringing them back

Conservation of Utah's native cutthroat trout

Cutthroat trout are making a comeback in Utah. Only a few decades ago, Utah's native cutthroat trout were in dire straits. Today they're providing anglers with a fun and new experience. And it's an experience that should continue well into the future.

Utah is home to three cutthroat trout subspecies: the Bonneville, Colorado River and Yellowstone.

Bonneville cutthroat trout

The historic range of the Bonneville cutthroat trout includes the drainages and lakes in Utah, Nevada, Idaho and Wyoming left over from ancient Lake Bonneville.

Bear Lake cutthroats are a form of the Bonneville cutthroat trout that live in lakes. Bear Lake cutthroats are native to the Bear Lake system.

Although the colors of Bonneville

cutthroat trout vary widely and depend on the habitat they occupy, Bonneville are characterized by a slate-gray to bronze body color. Large, rounded and sparsely scattered spots are found on the upper part of the body. The spots are usually near the tail.

Bear Lake cutthroat trout have deep orange pelvic and anal fins, but they often lack the bright crimson jaw slash that is so characteristic of Bonneville cutthroat trout. At times, the jaw slash on Bonneville cutthroats may also be yellow, gray, or not exist at all.



The Bonneville cutthroat trout is designated as Utah's official state fish.



SCOTT ROOT

Bonneville cutthroat trout were once believed to be extinct, and are now listed on Utah's Sensitive Species list.

In 1997, the Bonneville cutthroat trout was designated by the Utah legislature as Utah's official state fish.

Colorado River cutthroat trout

The historic range of the Colorado River cutthroat trout includes the Upper Colorado River Basin in western Colorado, southwestern Wyoming, eastern Utah and northwestern New Mexico.

In Utah, the range of the Colorado River cutthroat trout extends from the Escalante River Drainage in southern Utah to the North Slope of the Uintas in the north.

Colorado River cutthroats are best known for their bright and vivid coloration. This coloration often includes bright red hues on their gill plates and belly, and golden yellow coloration along their sides.

Yellowstone cutthroat trout

Yellowstone cutthroat trout are native to the Snake River watershed on

the north slope of the Raft River Mountains, in extreme northwestern Utah.

In the past, Division of Wildlife Resources biologists used Yellowstone cutthroats extensively in fish management and stocking programs throughout the state. Yellowstone cutthroat trout stocking has been discontinued in recent years, however. Instead of stocking Yellowstone cutthroats, DWR biologists are now stocking the cutthroat strains that are native to the drainages in which they're placed.

Yellowstone cutthroat trout are lightly spotted and have distinctly round spots near the tail.

Once plentiful, cutthroats almost disappeared

Before European settlement, the various subspecies of cutthroat trout were distributed widely over much of western North America, and they were abundant in Utah.

By the mid-1900s, however, signifi-

cant declines in both the distribution and abundance of cutthroat trout were evident across the region. Utah was no exception.

Destruction and fragmentation of habitat; overharvest by anglers; stream dewatering caused by diversions; the introduction of fish species not native to Utah; and disease were all factors that led to the decline of Utah's native cutthroat trout.

At one point, Bonneville cutthroat trout were even believed to be extinct.

Coming together

Because of their diminished populations, Bonneville and Colorado River cutthroat trout are listed as "conservation species" on Utah's Sensitive Species list. This means that conservation agreements developed by interagency conservation teams guide their management. These agreements bring resource agencies and other groups together to help the species.

One of the major goals of the con-

servation agreement process is to ensure the long-term viability and recovery of native cutthroat trout, so they won't be listed on the federal Endangered Species list. Conservation agreements usually include the following objectives: (1) identification and characterization of native cutthroat populations, (2) population protection and enhancement, (3) population restoration, (4) watershed and habitat restoration, (5) public outreach, (6) information sharing and maintenance of databases, and (6) team coordination.

The Yellowstone cutthroat is listed as a "species of concern" in Utah. The states of Montana, Wyoming, Idaho and Utah have joined in a conservation agreement to help recover the subspecies.

Bringing them back

The outlook for Utah's native cutthroats is improving. And the actions of conservation teams and agencies charged with conserving cutthroat trout and their habitats is one of the biggest reasons why.

Conservation activities in Utah began as early as 1973, and they've taken off since 1995. Today, Bonneville and Colorado River cutthroat occupy about 35 percent of their historic habitat in Utah. That's a big improvement over the situation that existed about 40 years ago.

The conservation actions that have led to this improvement include: general surveys; population monitoring; genetic evaluations; implementation of special fishing regulations; construction of fish barriers to isolate and protect cutthroats from nonnative fish; fish disease containment; development of brood stock; changes in stocking policies; non-native fish removal; restoration of native fish into previously occupied habitat; restoration of stream flows; interagency cooperation; and habitat acquisition, development, protection and restoration.

A new fishing experience

The interest in conserving Utah's native cutthroat trout goes well beyond a desire to keep them off the Endangered Species list. Native cutthroats are becoming more and more important to many Utahns.



SCOTT ROOT

Thanks to the actions of various conservation teams and agencies, the outlook for Utah's native cutthroat trouts is improving substantially.

For example, many anglers want to pursue native cutthroats and add them to the list of fish they've caught. It's not unusual for an angler to travel hundreds of miles to catch a Bonneville cutthroat trout in a small, isolated stream in the West Desert or a Colorado cutthroat trout in the High Uintas Wilderness Area.

Some of Utah's native cutthroat

strains also possess attributes that are very useful to Utah's statewide management programs. A great example is Strawberry Reservoir, where predatory Bear Lake cutthroats have shown an ability to control burgeoning populations of Utah chub.

Native cutthroat certainly have a place in Utah's fish management program, both now and well into the future. 🐟

By JILL WEST
Coordinator of Volunteers

Dedicated Hunter program

It keeps growing

The Dedicated Hunter program began in 1995 at the insistence of a group of determined Utah sportsmen.

These sportsmen wanted to give back to wildlife by working in the field with Division of Wildlife Resources biologists. In return, they asked for more opportunities to hunt deer.

A win-win-win situation was soon created for the DWR, hunters and Utah's wildlife.

Making a difference

When the Dedicated Hunter program began, 500 hunters were enrolled in a one-year program. Today the program is 9,977 members strong and requires a three-year commitment.

This volunteer group has become a major force in the conservation of Utah's wildlife habitats. They also make it possible for the DWR to host many fun and educational events that the agency would not be able to host otherwise.

In 2006, the DWR's volunteers

donated a total of 85,582 hours to wildlife and DWR projects. Dedicated hunters logged 85 percent of those total hours. We appreciate the volunteer hours, and the goods and services, that dedicated hunters and other volunteers donated last year. The contribution dedicated hunters have made to the DWR and to wildlife conservation in Utah has grown

during each of the last 12 years. We'd like to see that trend continue.

Still feels like family

The Dedicated Hunter program has grown almost exclusively by word-of-mouth publicity.

Many families and friends, who have hunted together for decades, join the program to increase the amount of time they get to spend hunting together. Many of them also find time to work together on volunteer projects.

More than half of the hunters who are in the program now have re-enrolled in the program several times. The Dedicated Hunter program is not for everyone, but those who like the program stick with it, and they often recruit their friends, co-workers and extended family to join.

Because the program continues to grow, DWR personnel must rely heavily on technology and electronic communication to keep in touch with all of its members. While a program this large could lose some of its personal touch, the close-knit community of hunters who have joined the program keep it feeling like family.

We do our best to try and get to know each of you personally. We hope to add more volunteer appreciation events and awards to our schedule in 2008. We're also working with sporting goods



stores to obtain donated items that we can raffle off at some of our more challenging work projects.

It's important to us that dedicated hunters have meaningful volunteer experiences. If you ever wonder why you've been asked to do something, or you're unclear about how your volunteer hours benefit wildlife, please ask us! We'd be happy to explain to you how your work fits into the DWR's efforts to manage Utah's wildlife.

Give us your ideas

The Dedicated Hunter rule has been adjusted through the years as the number of people who have joined the program has grown. We've tried to keep the program challenging, so dedicated hunters are set apart from other big game hunters in Utah, while still being customer friendly and flexible enough to work with.

If you have suggestions about how to improve the program, we'd love to hear from you. That's why we require you to attend a Regional Advisory Council meeting; we want you to understand how your input can shape DWR policy.

Please put your ideas for improving the Dedicated Hunter program in writing, and e-mail them to jillwest@utah.gov or mail them to:

Dedicated Hunter Program
P.O. Box 146301
Salt Lake City, Utah 84114-6301

Program will soon reach 10,000 cap

Every time I speak to a group of dedicated hunters, one of them asks me about the program's participant cap.

The participation cap says the program cannot exceed 10,000 dedicated hunters. And the program is rapidly approaching this cap.

This year we'll discuss ways to address this issue.

Many possibilities have been mentioned in the past. The most common include allowing hunters into the program through a draw system, raising the cap, and sticking with the first-come, first-served enrollment system.

All of these ideas are on the table. So are any new ideas that dedicated hunters, DWR personnel or other mem-

bers of the wildlife community would like to add to the list.

We'll start discussing this issue in March, and we'll seek your comments online in March and April.

Recommendations for Dedicated Hunter rule changes will be made at the July RAC meetings. We encourage you to send your written comments to us before these meetings. We also encourage you to attend your July RAC meeting and participate in it.

Dedicated Hunter program goes electronic

This is the last time you'll receive reminders about the Dedicated Hunter program in the *Wildlife Review* magazine.

But that doesn't mean we're going to stop communicating with you!

For many years, we've advertised our projects almost exclusively online and via e-mail. We're going to improve the Dedicated Hunter program Web site (wildlife.utah.gov/dh) so it will include even more information about the program, volunteer projects and contact information for volunteer program personnel.

Previous issues of the *Wildlife Review* have highlighted interesting volunteer projects and have recognized some of our stellar volunteers. This content will soon be available on the Dedicated Hunter Web site under a new link entitled "Dedicated Hunters at Work." Here you'll find photos and descriptions of noteworthy projects and volunteers.

Please visit the Web site often so you can stay up-to-date with deadlines and reminders about the program!

E-mail address

Only about half of the Dedicated Hunters have a valid e-mail address on file with us. If you don't have an e-mail account, please consider setting one up. Even if you don't visit the Internet much, or you access it from a library or from someone else's home, you'll benefit from receiving the Dedicated Hunter messages and reminders that we'll send you via e-mail.

E-mail accounts are easy to set up. You can set up a free e-mail account at several Web sites (www.hotmail.com,

2007—Dates to remember

April: Dedicated Hunter Limited Entry drawing winners will be notified. (Because of a change in state law, we can no longer post these results on our Web site.)

June 1: First mailing of Dedicated Hunter permits

July 10, 11, 12, 17 and 18: Proposed changes to the Dedicated Hunter rule will be presented at RAC meetings held on these dates. (These meetings will be the last chance to attend a RAC meeting in the Central and Northern regions before the archery season begins. A full RAC schedule is available at wildlife.utah.gov/public_meetings.)

August 1: Final mailing of DH permits

August 18: Archery deer hunt begins

Sept 11, 12, 13, 18 and 19: Last RAC meetings before the rifle deer season

Sept 26: Muzzleloader deer season begins

Oct 20: Rifle deer season begins

mail.yahoo.com and mail.google.com are all good places to try).

If you get a new e-mail address, or change your e-mail address, please let us know by calling your regional volunteer coordinator or sending a message to us at dwrvolunteer@utah.gov. Your message should include your full name, your Certificate of Registration (COR) number and your new e-mail account information.

Once we have a current e-mail address for you, you can expect to receive no more than five e-mail messages from us each month. These messages will include information about upcoming program deadlines, RAC meetings and volunteer projects.

Please get a valid e-mail address to us so you won't miss out on these valuable opportunities and reminders. 🐾

By DIANA VOS

Project WILD Coordinator

Getting children back to nature

"To know this world is to gain a proprietary attachment to it. To know it well is to love and take responsibility for it."

Edward O. Wilson
The Future of Life, 2002

You may not realize it, but the future of Utah's wildlife and the state's wild places is in your hands. Especially if you're a parent, a teacher or an adult who is in a position to influence young people.

Please read on to find out why and how you can make a difference.

Plugged in: but not to nature

Research has shown that there is a disconnect between today's children and their natural world. A growing body of evidence is helping us understand how this lack of connection is going to affect our natural world.

Much of this evidence is found in Richard Louv's groundbreaking 2005 book *Last Child in the Woods: Saving our Children From Nature-Deficit Disorder*.

Including both research and anecdotal evidence collected over a 10-year period, Louv discusses the role nature plays in the health and development of our children. He also writes about the concern these children may, or may not have, about the continuing loss of our planet's natural resources.

According to a 2002 *Journal of Science* survey, it's easier for the average

eight-year-old to identify the cartoon characters in the electronic game *Pokemon* than the beetles and oak trees in his or her community. A fourth grader's quote in a recent survey, "I like to play indoors better 'cause that's where all the electrical outlets are," is not especially surprising.

Our changing connection to nature

As humanity evolved over the past 120,000 or more years, people roamed across savannahs and lived in forests. They lived in intimate contact with nature. As humans cultivated plants and domesticated animals, permanent settlements arose, but people still remained close to nature. Children lived in places that were surrounded by fields, farms and the edges of wilder environments.

Even as late as the early 1970s, when most people lived in cities, children could still freely explore isolated woodland plots, abandoned fields and neighborhood parks.

Today, children in many Western countries have limited freedom to explore natural areas. By the early 1990s, the radius where children were allowed to roam around their homes had shrunk to a ninth of what it was in 1970. Some of the trends that have increased the gap between children and nature include fears about traffic, strangers and virus-carrying mosquitoes; decreasing green spaces and access to them; and television, computers and technology-based education.

Virtual experiences through elec-

tronic media have started to replace the "real" experiences children used to have. These virtual experiences are making children think nature is exotic and far away, in places they'll never experience. They're losing the understanding that nature exists in their own backyards and in their own neighborhoods.

Children are spending more of their free time indoors. In a recent study, about 60 percent of children surveyed said they had seen more animals on television and in the movies than they had in the wild. Only 40 percent of children living in rural areas said they had ever spent more than 30 minutes in a wild place, and less than 20 percent of the children living in urban areas had ever seen wildlife in a natural setting.

In his 2002 book *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations*, Stephen Kellert writes that society has become "so estranged from its natural origins it has failed to recognize our species' basic dependence on nature as a condition of growth and development."

A lack of time in the outdoors also decreases children's knowledge of and appreciation for their natural world. That lack of knowledge and appreciation tends to breed apathy towards environmental concerns.

Mother nature: not just an old pagan proverb

Louv's highlights from the fields of psychology, education and other

disciplines reveals strong correlations between exposure to nature and improved childhood development. This exposure to nature nurtures children as they grow.

Research has shown that the natural environment has profound effects on the health and development of children. The findings have shown that time spent in natural environments inspires creativity, imagination and powers of observation; buffers stress and helps children deal better with adversity; improves concentration and self-discipline; boosts motor fitness and health; stimulates positive social behavior and interaction between children; enhances learning development, improving awareness, reasoning and observational skills; promotes humility, connection with nature and a sense of place; and helps children with Attention Deficit Hyperactivity Disorder concentrate better.

Growing green kids

As children continue to become disconnected with nature, they aren't the only ones who will lose. This disconnect is also setting the stage for a continual loss of the natural environment upon which all of us depend. "People who care, conserve; people who don't know, don't care. What is the extinction of the condor to a child who has never seen a wren?" Robert Pyle writes in his 1993 book *The Thunder Trees: Lessons from an Urban Wildland*.

Research has clearly shown that a child's love of nature, along with a positive environmental ethic, grows out of regular contact with their natural world. In one survey, adults were asked what inspired them to care about the environment and at what time in their lives that inspiration occurred. Most of the adults interviewed said the time they spent as a child in natural places, and family members who helped them understand the value of the environment, were the main reasons they grew up caring about nature.

With the current trends in society, the last chance to connect our children with their natural world, and create a

future generation that values and preserves it, is rapidly slipping away.

What nature does for people

Many adults understand the emotional and social reasons why people need to experience wildlife and nature from time to time. They recognize the role nature plays in recharging our batteries.

For some, simply taking a walk in a park or setting up a backyard bird feeder meets their needs for nature. Others seek out more active pastimes, such as hiking, hunting, canoeing or photographing wildlife.

In addition, adults are starting to appreciate how wild creatures and places are more than a source of personal pleasure and recuperation. For example, people are starting to understand that the health of wildlife is an excellent indication of the health of the environment on which all of us depend. We're also starting to understand that healthy wildlife populations and habitat are important to our social and economic well-being. We're starting to reflect on the role wildlife has played in the cultural and spiri-

tual aspects of our lives; how wildlife has inspired various human endeavors in art, music, dance, drama and literature. Economists are starting to calculate the billions of dollars wildlife and nature tourism contribute to our national economy every year.

Beyond the social and economic benefits, wildlife and wild habitats play a vital role in the ecological and biological processes that are essential to life itself.

The functioning of the biosphere, including the maintenance and enhancement of human life, depends on countless

interactions among plants, animals and microorganisms.

Wild species play a key role in several biological processes. Some of these processes include pollinization, seed dispersal, germination, soil generation, nutrient cycling, predation, waste breakdown, degradation and removal of pollutants, and pest control. These processes are essential for agriculture, forestry, fisheries and other endeavors that are necessary for human life.

Sustaining biological diversity is also important if we want to preserve

A lack of time in the outdoors... tends to breed apathy towards environmental concerns.



Opportunities for children to explore natural areas are diminishing.



RUSS LAWRENCE

Nature can play a substantial role in recharging our children's batteries.

the genetic diversity needed to maintain stocks that are adapted to local or regional conditions and that can withstand pests, diseases, predators, pollutants and other threats. Medicine and the development of new drugs and treatments also depend greatly on wild animals and plants.

No child left inside

When you consider the need to sustain the Earth's biological diversity, you can see that healing the broken bonds between children and nature is in our best interest.

There are many ways to accomplish this goal. One way is for parents to get their family out-of-doors and into their natural environment more often. In her 2006 book *It's a Jungle Up There*, Margaret Lowman advocates nature-based immersion for the entire family—not just children—as a way to foster a family conservation ethic.

In response to concerns about the spread of nature-deficit disorder, more and more resources and programs are sprouting up to help. For example, various Watchable Wildlife events sponsored by the Division of Wildlife Resources provide great opportunities for families to get out and appreciate wildlife. Information about these wildlife-viewing

events is available at wildlife.utah.gov/watchable-wildlife.

WILD and natural

If you're an educator, many excellent programs are available to you. These programs include Project WILD and Project Learning Tree. Both of these programs offer resources and materials that will help you educate your school children about natural environments and the wild species they support.

A new "Flying WILD" program, which focuses on bird education and conservation, will soon be available to Utah educators through the Division of Wildlife Resources.

You can also get students involved in nature by helping them transform a part of their schoolyard from a barren area of grass, asphalt and manmade equipment into a more natural environment. This type of environment gives children a place to explore and play, and supports classroom learning.

You can turn part of your schoolyards into a mini-wildlife habitat, pond, stream or butterfly garden that can be used for place-based and project-based education. These mini-wildlife habitats promote experiential learning through discovery and hands-on experiences with nature.

Research on naturalized schoolyards has shown that these areas have a positive effect on the development of children's environmental stewardship values. The research has also shown that the more diverse these natural landscapes are, the greater a child's appreciation will be of nature and his or her experiences in it.

A combination of formal learning and informal, positive experiences in naturalized environments is closely associated with the development of a child's responsible behaviors. A national report presented by Leiberman and Hoody in 1998, titled *Closing the Achievement Gap*, shares the results of a study of 40 schools. These schools used the natural environment as an integrating context for learning by incorporating problem-solving and project-based activities.

The benefits the researchers observed included better performance on standardized measures of academic achievement in reading, writing, math, science and social studies; reduced discipline and classroom management problems; increased student engagement and enthusiasm for learning; and greater pride and ownership in their accomplishments.

Project WILD in Utah offers small grants that allow educators to initiate schoolyard NatureScapes at their schools.

If we provide today's youth with more opportunities to explore, discover and learn in natural environments, children and society as a whole will benefit. The evidence seems to indicate that this will help future generations possess the environmental values needed to become stewards of the Earth and its diversity of nature. 🌱

Getting WILD! Utah's WILD Notebook is produced by Utah's Project WILD program. WILD workshops, offered by the Division of Wildlife Resources, provide teachers and other educators with opportunities for professional development and a wealth of wildlife education activities and materials to help students learn about wildlife and its conservation. For a current listing of Project WILD educator workshops, visit the Project WILD Web site at wildlife.utah.gov/projectwild or e-mail Diana Vos at dianavos@utah.gov.

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